

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

NOTES ON NEARCTIC SPIDERS CHIEFLY OF THE
FAMILY THERIDIIDAE.

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For several years the writer has enjoyed the privilege of studying the Araneae in the collections of the United States National Museum. Among this material were found many of the specimens upon which Keyserling, in the latter part of the last century, based a number of new species. The work of making known the presence of these specimens and properly cataloguing the types was therefore indicated.

In addition to reporting the presence of Keyserling's types, as regards the family Theridiidae, opportunity is taken to describe three new species, two in the Theridiidae and one in the Lycosidae. Records of other species in the former family are also included, inasmuch as little is known concerning the distribution of these spiders.

I wish to express my appreciation to the authorities of the United States National Museum, especially Dr. E. A. Chapin, for their generosity in making loans and for desk space during long periods. Particular thanks are also due Dr. W. J. Gertsch of the American Museum of Natural History for his kindness and assistance.

Family Theridiidae.

Argyrodes globosus Keyserling.

Argyrodes globosus Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I): 204, Pl. X, fig. 123, 1884.

Type.—The male holotype of this species from Crescent City, Florida, is in the United States National Museum (U. S. N. M. Cat. No. 1328).

Argyrodes cancellatus (Hentz).

Theridium cancellatus Hentz, Boston Jour. Nat. Hist. 6 : 278, Pl. IX, figs. 17, 18, 1850.

Argyrodes larvatus Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I): 197, Pl. IX, Fig. 118, 1884.

Type.—The male holotype of *A. larvatus* Keys. from Columbus, Texas,

which is regarded as a synonym of *A. cancellatus* (Hentz), is in the United States National Museum (U. S. N. M. Cat. No. 1327). Other records are as follows: CALIFORNIA, San Diego, male and female. DISTRICT OF COLUMBIA, Washington, female. FLORIDA, Key West, female.

Argyrodes trigonum (Hentz).

Theridium trigonum Hentz, Boston Jour. Nat. Hist. 6 : 280, Pl. IX, figs. 24, 25, 1880.

Records.—DISTRICT OF COLUMBIA, Washington, male, two females. FLORIDA, Indian River, female. TEXAS, Houston, male.

Asagena americanum Emerton.

Asagena americanum Emerton, Conn. Acad. Arts and Sci. Trans. 6 : 23, Pl. IV, Fig. 6, 1882.

Records.—DISTRICT OF COLUMBIA, Washington, female. RHODE ISLAND, Providence, male.

Crustulina guttatum Wider.

Theridium guttatum Wider, Reuss. Zool. Miscel., p. 241, Pl. XVI, fig. 7, 1834.

Record.—DISTRICT OF COLUMBIA, Washington, male and female.

Dipoena buccalis Keyserling.

Dipoena buccalis Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part II): 42, Pl. XII, fig. 157, 1886.

Type.—This species was described from female specimens taken in Philadelphia, Pennsylvania, Fort Monroe, Virginia, and Atlantic City, New Jersey. The specimens from Atlantic City and Fort Monroe are in the United States National Museum, and the former is herewith designated the type (U. S. N. M. Cat. No. 1329). A female from Washington, D. C., is also in the collection.

Enoplognatha marmorata (Hentz).

Theridium marmoratum Hentz, Boston Jour. Nat. Hist. 6 : 273, Pl. IX, fig. 3, 1850.

Lithyphantes tectus Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I): 138, Pl. VI, fig. 86, 1884.

Type.—The male holotype of *L. tectus* (Keys.) from Denver, Colorado, is in the United States National Museum (U. S. N. M. Cat. No. 1324). This name is regarded as a synonym of *E. marmorata* (Hentz). Other records of the species are as follows: DISTRICT OF COLUMBIA, two males, three females. FLORIDA, Crescent City, female. INDIANA, seven females. LABRADOR, female. MONTANA, Helena, female.

Euryopsis funebris (Hentz).

Theridium funebre Hentz, Boston Jour. Nat. Hist. 6 : 277, Pl. IX, fig. 11, 1850.

Records.—DISTRICT OF COLUMBIA, Washington, three females. SOUTH DAKOTA, Hill City, female.

Lithyphantes corollatus (Linnaeus).

Aranea corollatus Linnaeus, Syst. Nat., 10 ed., p. 621, 1758.

Records.—COLORADO, Empire City, male and female; Denver, two females. SOUTH DAKOTA, Hill City, female. UTAH, Spring Lake, two females; Summit Canyon, three females; Salt Lake, female.

Lithyphantes fulvus Keyserling.

Lithyphantes fulvus Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I): 142, Pl. VI, fig. 89, 1884.

Type.—A female from Spring Lake, Utah, which was undoubtedly among Keyserling's original material, is herewith designated the type (U. S. N. M. Cat. No. 1326). Other records are as follows: FLORIDA, Archer, two females; Crescent City, numerous specimens. GEORGIA, Savannah, four females. TEXAS, Columbus, female. UTAH, Salt Lake City, five females.

Pedanostethus laticeps (Keyserling).

Theridion laticeps Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I): 96, Pl. V, fig. 63, 1884.

Type.—The female holotype of this species, marked "Wyoming Territory," is in the United States National Museum (U. S. N. M. Cat. No. 1323).

Steatoda borealis (Hentz).

Theridium boreale Hentz, Boston Jour. Nat. Hist. 6 : 274, Pl. IX, fig. 4, 1850.

Records.—COLORADO, Denver, two females. DISTRICT OF COLUMBIA, Washington, numerous specimens. IOWA, Davenport, two males. OREGON, Lake Klamath, two females. PENNSYLVANIA, Altoona, three females. SOUTH DAKOTA, Hill City, male, four females.

Steatoda merula, new species.

(Fig. 3.)

Female.—Total length, 7.00 mm. Carapace, 2.90 mm. long, 2.40 mm. at widest place, .70 mm. wide in front. Carapace and abdomen colored as in the other species of the genus. Legs reddish brown, much lighter below than above, the femora darker. Sternum dark brown with evidences of a lighter median stripe, much darker than coxae and contrasting strongly with them. Anterior row of eyes recurved, slightly narrower than the procurved posterior row. Anterior median eyes closer to anterior lateral than to each other and larger than the latter (5/3); separated from each other by about three-fifths of a diameter, about one-half that distance from the anterior laterals. Eyes of posterior row subequal, the posterior median closer to posterior lateral than to each other; removed from each other by more than a diameter, from the posterior lateral by about three-fourths of a diameter. Lateral eyes of each row contiguous. Median ocular quadrangle slightly wider than long (13/11), about as wide in front as behind. Clypeus about two and one-half times as high as diameter of an anterior median

eye. Lower cheliceral margin without distinct teeth. Tibia and patella I, 2.70 mm. long. Tibia and patella IV, 3.50 mm. long. For structure of epigynum see Fig. 3.

Type locality.—Arizona: Female holotype from Mt. Lemmon, August 22, 1937 (C. J. Drake, Collector), in the author's private collection. Female paratype from an unknown locality in Arizona, and a female paratype from an unknown locality in New Mexico, in the United States National Museum.

Type.—U. S. N. M. Cat. No. 1368.

This new species is most closely related to *S. grandis* Banks and *S. zionis* Chamberlin and Ivie, from which it may be readily distinguished by the smaller and deeper atrium of the epigynum.

Teutana triangulosa (Walckenaer).

Aranea triangulosa Walckenaer, Faune Paris, 2 : 207, 1802.

Records.—DISTRICT OF COLUMBIA, Washington, February, three females. INDIANA, female. NEW JERSEY, Atlantic City, male and female. NORTH CAROLINA, Chapel Hill, female.

Teutana grossa (C. Koch).

Theridion grossum C. Koch, Die Arachniden, 4 : 112, Pl. CXL, Fig. 321, 1838.

Record.—CALIFORNIA, San Diego, female.

Theridion amputatum Keyserling.

Theridion amputatum Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I) : 90, Pl. IV, fig. 58, 1884.

Type.—The male holotype of this species from "Centreville," Florida, is in the United States National Museum (U. S. N. M. Cat. No. 1322).

Theridion antonii Keyserling.

Theridion antonii Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I) : 54, Pl. II, fig. 31, 1884.

Type.—The male holotype of this species from San Antonio, Texas, is in the United States National Museum (U. S. N. M. Cat. No. 1320).

Theridion differens Emerton.

Theridium differens Emerton, Conn. Acad. Arts and Sci. Trans. 6 : 9, Pl. I, fig. 1, 1882.

Records.—DISTRICT OF COLUMBIA, Washington, two males and female. LAKE SUPERIOR, July, two males. PENNSYLVANIA, Altoona, two males. VIRGINIA, Fort Monroe, female.

Thiridion murarium Emerton.

Theridium murarium Emerton, Conn. Acad. Arts and Sci. Trans. 6 : 11, Pl. I, fig. 3, 1882.

Records.—ARIZONA, Winslow, female. CALIFORNIA, Occidental, two females. INDIANA, female. WASHINGTON, female.

Theridion pictipes Keyserling.

Theridion pictipes Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I): 64, Pl. III, fig. 38, 1884.

Type.—The female holotype of this species from "Centreville," Florida, is in the United States National Museum (U. S. N. M. Cat. No. 1321).

Theridion saylori, new species.

(Fig. 1.)

Female.—Total length, 6.20 mm. Carapace, 2.10 mm. long, 2.00 mm. at the widest place, .60 mm. wide in front. Carapace uniform dark brown without light markings. Clypeus somewhat lighter. Sternum, endites, labium, and coxae light brown. Legs light yellowish brown, femora darker than other joints; none of the joints annulate. Dorsum of abdomen grayish black in ground color with white punctations; venter dark with two white spots near spinnerets. First row of eyes procurved, medians somewhat closer to each other than to laterals and three-fourths as large as the latter. Second row of eyes slightly wider than first (15/14), the eyes equidistant with the medians three-fourths as large as the laterals. Median ocular quadrangle about as wide as long, narrower in front than behind (18/21). Clypeus higher than the median ocular quadrangle is long (22/20). Legs armed with numerous setae. Left leg I, 9.30 mm. long (coxa, .50 mm.; trochanter, .20 mm.; femur, 2.08 mm.; patella, .80 mm.; tibia, 2.40 mm.; metatarsus, 2.12 mm.; tarsus, 1.00 mm.). Left leg IV, 8.90 mm. long (coxa, .50 mm.; trochanter, .40 mm.; femur, 2.40 mm.; patella, .80 mm.; tibia, 1.70 mm.; metatarsus, 2.00 mm.; tarsus, 1.10 mm.). For structure of epigynum see Fig. 1.

Type locality.—Missouri: Female holotype from Ozark Lake, July 14, 1937 (L. Saylor, Collector).

Type.—U. S. N. M. Cat. No. 1369.

This new species may be readily separated from the other members of its genus by the structure of the epigynum and by the design on the abdomen.

Theridion spirale Emerton.

Theridion spirale Emerton, Conn. Acad. Arts and Sci. Trans. 6 : 10, Pl. I, Fig. 2, 1882.

Records.—ARIZONA, male. DISTRICT OF COLUMBIA, Washington, June, numerous specimens. MARYLAND, Chesapeake Bay, six males. PENNSYLVANIA, Philadelphia, August, female, two males.

Theridion studiosum Hentz.

Theridion studiosum Hentz, Boston Jour. Nat. Hist. 6 : 275, Pl. IX, fig. 5, 1850.

Records.—DISTRICT OF COLUMBIA, Washington, July, female. FLORIDA, Tampa, female. NEW YORK, Long Island, September, female. SOUTH DAKOTA, Hill City, female.

Theridion unimaculatum Emerton.

Theridion unimaculatum Emerton, Conn. Acad. Arts and Sci. 6 : 15, Pl. II, fig. 4, 1882.

Records.—DISTRICT OF COLUMBIA, Washington, numerous specimens. FLORIDA, five males. MARYLAND, Chesapeake Bay, female, four males.

Tidarren fordum (Keyserling).

Theridion fordum Keyserling, Spinnen Amerikas, Theridiidae, 2 (Part I): 23, Pl. I, Fig. 9, 1884.

Record.—FLORIDA, female.

Tidarren minor Chamberlin and Ivie.

Tidarren minor Chamberlin and Ivie, Utah Univ. Bul. 24 : 10, Pl. II, fig. 10, Pl. III, figs. 24, 25, 1934.

Records.—CALIFORNIA, San Francisco, female. DISTRICT OF COLUMBIA, Washington, female. FLORIDA, Key West, female.

Family Lycosidae.

Tarentula aquilonaris, new species.

(Fig. 2.)

Male.—Total length, 11.10 mm. Carapace, 5.00 mm. long, 3.30 mm. at widest place, 1.80 mm. wide in front. Carapace reddish brown with a broad median light longitudinal stripe and a lateral light submarginal band. Eye region darker, the eyes on black spots. Sternum dark brown to black. Endites, coxae, and distal portion of labium reddish brown. Femora dark brown with irregular annulations, remainder of legs much lighter. Dorsum of abdomen brown with a basal lanceolate mark; sides darker; venter concolorous with dorsum. First row of eyes slightly procurved, the medians separated by a diameter, closer to the laterals than to each other and subequal to them. Second row of eyes wider than first (22/18), narrower than third (22/28), the eyes separated by about two diameters. Clypeus equal in height to diameter of an anterior median eye. Chelicera with two subequal teeth on lower margin. Each tibia armed with three pairs of ventral spines below. Left leg I, 10.70 mm. long (coxa, 1.40 mm.; trochanter, .40 mm.; femur, 2.30 mm.; patella, 1.40 mm.; tibia, 2.00 mm.; metatarsus, 1.70 mm.; tarsus, 1.50 mm.). Left leg IV, 15.8 mm. long (coxa 1.60 mm.; trochanter, .50 mm.; femur, 3.50 mm.; patella, 1.60 mm.; tibia, 2.80 mm.; metatarsus, 3.80 mm.; tarsus, 2.00 mm.). For structure of epigynum see Fig. 2.

Type locality.—Alaska: Female holotype from Attu Island, June 9, 1937 (V. B. Scheffer, Collector).

Type.—U. S. N. M. Cat. No. 1370.

This new species may be separated from the other members of its genus by the structure of the epigynum.

EXPLANATION OF ILLUSTRATION.

Fig. 1. *Theridion saylori*, new species, epigynum.

Fig. 2. *Tarentula aquilonaris*, new species, epigynum.

Fig. 3. *Steatoda merula*, new species, epigynum.

